



## Molecular assessment of bacterial pathogens - A contribution to drinking water safety

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### Abstract:

Human bacterial pathogens are considered as an increasing threat to drinking water supplies worldwide because of the growing demand of high-quality drinking water and the decreasing quality and quantity of available raw water. Moreover, a negative impact of climate change on freshwater resources is expected. Recent advances in molecular detection technologies for bacterial pathogens in drinking water bear the promise in improving the safety of drinking water supplies by precise detection and identification of the pathogens. More importantly, the array of molecular approaches allows understanding details of infection routes of waterborne diseases, the effects of changes in drinking water treatment, and management of freshwater resources.

**Source:** <http://dx.doi.org/10.1016/j.copbio.2008.04.004>

### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Food/Water Quality

**Food/Water Quality:** Pathogen

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Global or Unspecified

#### Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease, Respiratory Effect

**Infectious Disease:** Airborne Disease, Foodborne/Waterborne Disease, Zoonotic Disease

**Airborne Disease:** Other Airborne Disease

**Airborne Disease (other):** Legionella

**Foodborne/Waterborne Disease:** Campylobacteriosis, E. coli, Salmonellosis, Shigellosis, Vibrioses

**Foodborne/Waterborne Disease (other):** Yersiniosis; ulcers; Arcobacter butzleri; Mycobacteriosis

**Zoonotic Disease:** Tularemia

**Respiratory Effect:** Other Respiratory Effect

**Respiratory Condition (other) :** Legionella

**Resource Type:** ☐

format or standard characteristic of resource

Review

**Timescale:** ☐

time period studied

Time Scale Unspecified